

SEMICONDUCTOR DEVICE AND PROCESS OF PRODUCTION OF SAME

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ABSTRACT OF THE DISCLOSURE

10 A semiconductor device, in particular a thin  
semiconductor package, which reduces and simultaneously  
achieves a uniform mounting height, does not require  
complicated steps for mounting individual chips, improves  
the manufacturing yield, achieves a uniform height of the  
semiconductor device without being affected by the  
variation in thickness of the chip, and enables execution  
15 of an electrical test all together, and a process for  
production of the same, wherein a semiconductor is  
mounted, with its back surface exposed upward, on the top  
surface of an insulating tape substrate having through  
holes in the thickness direction, the area around the  
20 side surfaces of the semiconductor element is sealed by a  
sealing resin layer, metal interconnections formed on the  
bottom surface of the tape substrate define the bottom  
portions of the through holes of the tape substrate, a  
solder resist layer having through holes in the thickness  
25 direction covers the bottom surface of the metal  
interconnections and the tape substrate, connection  
terminals extending downward from the active surface of  
the semiconductor element are inserted into the through  
holes of the tape substrate, a filler comprised of a  
30 conductive material fills the gaps between the connection  
terminals and the through holes of the tape substrate,  
and the connection terminals and the metal  
interconnections are electrically connected.